



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,038	02/27/2006	Yuji Okamoto	64985(49381)	1093
21874 7590 03/04/2011 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205				
EXAMINER LEWIS, LISA C				
ART UNIT 2436		PAPER NUMBER		
MAIL DATE 03/04/2011		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/570,038

Applicant(s)

OKAMOTO ET AL.

Examiner

Lisa Lewis

Art Unit

2436

Period for Reply
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's response with amendments filed 01/14/2011 has been received and entered.

Applicant has amended claims 6 and 9-11, and has cancelled claims 7, 8, and 12-15. Claims 6 and 9-11 are presented for examination on the merits.

Response to Arguments

Applicant's arguments have been carefully considered but are deemed moot in view of the new grounds of rejection presented below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 6 and 9-11 applicant uses means plus function language. These claims are rejected for lacking sufficient structure. Please note that although examiner originally stated that structural support is found in the specification, after further consideration, it is unclear if there is structural support for all the limitations, especially in light of the new amendments. For example, what is the structure that performs a "means for detecting whether or not a processing unit is provided..." and what is the structure that performs "means for deciding that the concealing method is set to authenticate...."? Further, some of the "units" as shown in the diagram could simply be software.

3. Since the applicant is now claiming means for deciding that the concealing method is set to authenticating if the processing unit is active, and means for deciding that the concealing method is set to encrypting and authenticating, it creates confusion in the claims. There is claimed a processing unit for processing the data, which appears to be an encrypting unit, in light of the specification. However, there

Art Unit: 2436

is claimed a means for concealing the data. Are there two encrypting units? It is unclear what the means for concealing is referring to. Is this part of the processing unit? Is there an alternative encrypting unit used as a backup for the processing unit? Is the processing unit only available to encrypt, and the concealing unit is available to authenticate, and encrypt if necessary, so that if the processing unit goes down, the concealing unit acts as a backup for the processing unit? It would appear that the means for concealing would be an encrypting/authenticating unit. However, the claims in light of the specification imply that the means for concealing can be done at the processing unit. Therefore it is unclear what are the means for concealing. Appropriate clarification is required. Claims will be interpreted as best understood at this time.

4. The examiner notes to the applicant:
5. The rejection (regarding lacking sufficient structure) can be overcome by executing one of the following options:
 - a. Pointing out to the examiner, the structure and algorithm for invoking the means plus function rule from the specification.
 - b. Strike the means plus function claim language from the claim.
 - c. Cancel the claim.
6. Applicant is required to comply with the above in order to overcome the rejection. Further amendments may be necessary to overcome the 112 2nd rejection regarding the confusion in the claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2436

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki (JP 2000-244753) in view of Huisman et al. (US 2005/0108599) and Yoshiki (JP 11-275326), and further in view of Chrisop et al. (US 2001/0025343).

9. Regarding claim 6, Matsuaki teaches an image processing apparatus including a storing unit for storing image data and performing an output process based on the image data stored in the storing unit (An image memory of a facsimile equipment is used to store image data and an image output part for outputting stored image data stored in the image memory - see abstract, for example), comprising a controller including:

d. Means for designating the image data stored in the storing unit and accepting an instruction for concealment of the designated image data (A data specifying part is used for specifying image data in the image memory and a cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

e. Means for concealing the designated image data based on the accepted instruction (A cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

10. Matsuaki further teaches that there is a means for concealing by encryption (i.e., processing unit) and a means for concealing by authenticating (i.e., password) - see abstract and [0014], for example.

11. Matsuaki does not teach checking that the processing unit (cipher image encoding part) is provided and active, and determining that concealing equals encryption and authentication if the unit is not active and determining that the concealing equals authentication if the unit is active.

12. Huisman et al. teach a redundancy arrangement wherein when a function with redundant backup protection is failing (i.e., unavailable or invalid), backup units are activated when necessary (i.e., redundancy is only provided by the backup unit when the function is failing) - see [0046], for example.

Art Unit: 2436

13. Mutsuaki and Huisaman et al. do not teach a means for nullifying unconcealed image data.
14. Yoshiki beneficially teaches that to cope with an image storing memory being full, the oldest non-protected image is deleted (i.e., nullified) from the image memory - see abstract, and [0048] - [0050], for example.
15. Mutsuaki, Huisman et al., and Yoshiki do not teach that the nullifying of the data comprises overwriting the image data with meaningless data whereby the image is prevented from recurring in the storing unit in reproducible form.
16. Chrisop et al. teach a method wherein image data is overwritten by zeros and ones or by random data and this can be performed a repeated number of times - see abstract, figure 1, and [0044], for example. Further Chrisop et al. teach that when deleting data or overwriting data, some of the data still resides in memory - see [0012] and [0013], for example. Christop et al. teach that it is beneficial to overwrite multiple times, and that several government agencies require at least three overwrites of data - see [0019].
17. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki by determining when a unit (such as an encryption unit) is failing or inactive, and providing a backup unit that takes on its function (such as encryption) only when necessary, for the purpose of reducing redundancy and providing backup protection in case of unavailability, based upon the beneficial teachings provided by Huisman et al. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki and Huisman et al. by allowing non-protected images to be deleted, for the purpose of freeing up memory space, based upon the beneficial teachings provided by Yoshiki. It also would have been obvious to one of ordinary skill in the art at the time of the claimed invention to modify the teachings of Mutsuaki, Huisman et al., and Yoshiki by allowing the nullification to be overwriting the

Art Unit: 2436

image data with meaningless/random data multiple times, for the purpose of protecting the image data from being reproduced, based on the beneficial teachings provided by Chrisop et al. These modifications would result in increased security, which is an obvious benefit to the skilled artisan. Additionally, the cited references are in the field of image storing devices and encryption, as is the current application, and thus, are in analogous arts.

18. Regarding claim 9, Matsuaki teaches that:

f. The controller includes means for decoding the encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

19. Regarding claims 10 and 11, Matsuaki teaches:

g. The controller further comprises:

i. Means for accepting authentication information (A password input unit) - see [0014], for example.

ii. Means for verifying the authentication information set to the image data with the accepted authentication information (A password judgment part judges whether the password is proper) - see [0014], for example.

iii. Means for permitting the output process of the image data in the case where the authentication information set to the image data matches the accepted authentication information (The image data is output if the password is proper (i.e., if the inputted password matches the correct password) - see [0014], for example.

Art Unit: 2436

- h. The controller decodes encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

Conclusion

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). In re: Upsher-Smith Labs. v. PamLab, LLC, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); Merck & Co. v. Biocraft Labs., Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); In re Fracalossi, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2436

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lewis whose telephone number is (571) 270-7724. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. L./
Examiner, Art Unit 2436

/Nasser Moazzami/
Supervisory Patent Examiner, Art Unit 2436